

Docket No. AUS920010952US1

CLAIMS:

What is claimed is:

1. A method for securing radio transmissions utilizing
5 a conventional radio, said method comprising the steps
of:

providing a conventional radio, said conventional
radio being incapable of encrypting or decrypting
signals;

- 10 providing a computer system coupled between a
microphone and said radio, wherein inputs into said radio
are received first by said computer system, said computer
system being separate and apart from said radio;

- receiving, within said computer system, an input
15 analog signal from said microphone;

encrypting, within said computer system, said input
analog signal utilizing public key encryption;

passing said encrypted input analog signal from said
computer system to said radio; and

- 20 transmitting said encrypted input analog signal
utilizing said radio, wherein radio transmissions from
said radio are secured.

2. The method according to claim 1, further comprising
25 the step of encrypting, within said computer system, said
input analog signal utilizing a key pair, said key pair
including a public key and a private key.

3. The method according to claim 2, further comprising
30 the step of encrypting, within said computer system, said
input analog signal utilizing said public key.

Docket No. AUS920010952US1

4. The method according to claim 1, further comprising the steps of:

receiving, within a Java application executing within said computer system, said input analog signal

5 from said microphone;

encrypting, utilizing said Java application, said input analog signal utilizing public key encryption;

passing said encrypted input analog signal from said Java application to said radio.

10

5. The method according to claim 1, further comprising the step of passing said encrypted analog signal from said computer system to a microphone port included in said radio.

15

6. The method according to claim 1, further comprising the steps of:

providing a second conventional radio, said second conventional radio being incapable of encrypting or

20 decrypting signals;

providing a second computer system coupled between a speaker and said second radio, wherein outputs from said second radio are received first by said second computer system before being output to said speaker, said second computer system being separate and apart from said second radio;

25

receiving, within said second computer system, an encrypted output from a speaker port included within said second radio;

30

decrypting, within said second computer system, said encrypted output utilizing public key encryption; and

Docket No. AUS920010952US1

outputting said decrypted output from said second computer system to said speaker.

7. The method according to claim 6, further comprising
5 the step of encrypting, within said computer system, said input analog signal utilizing a key pair, said key pair including a public key and a private key.

8. The method according to claim 7, further comprising
10 the step of encrypting, within said computer system, said input analog signal utilizing said public key.

9. The method according to claim 8, further comprising the steps of:
15 obtaining, by said second computer system, said private key of said computer system; and
decrypting said encrypted input analog signal utilizing said private key.

10. The method according to claim 9, further comprising
20 the step of exchanging said private key between said computer system and said second computer system prior to transmissions of radio signals.

11. A system for securing radio transmissions utilizing
25 a conventional radio, comprising:
a conventional radio, said conventional radio being incapable of encrypting or decrypting signals;
computer system coupled between a microphone and
30 said radio, wherein inputs into said radio are received first by said computer system, said computer system being separate and apart from said radio;

Docket No. AUS920010952US1

said computer system for receiving an input analog signal from said microphone;

said computer system for encrypting said input analog signal utilizing public key encryption;

5 said computer system for passing said encrypted input analog signal from said computer system to said radio; and

said radio for transmitting said encrypted input analog signal, wherein radio transmissions from said
10 radio are secured.

12. The system according to claim 11, further comprising said computer system for encrypting said input analog signal utilizing a key pair, said key pair including a
15 public key and a private key.

13. The system according to claim 12, further comprising said computer system for encrypting said input analog signal utilizing said public key.
20

14. The system according to claim 11, further comprising:

Java application executing within said computer system for receiving said input analog signal from said
25 microphone;

said Java application for encrypting said input analog signal utilizing public key encryption;

said Java application for passing said encrypted input analog signal from said Java application to said
30 radio.

Docket No. AUS920010952US1

15. The system according to claim 11, further comprising said computer system for passing said encrypted analog signal from said computer system to a microphone port included in said radio.

5

16. The system according to claim 11, further comprising:

a second conventional radio, said second conventional radio being incapable of encrypting or
10 decrypting signals;

a second computer system coupled between a speaker and said second radio, wherein outputs from said second radio are received first by said second computer system before being output to said speaker, said second computer
15 system being separate and apart from said second radio;

said second computer system for receiving an encrypted output from a speaker port included within said second radio;

said second computer system for decrypting said
20 encrypted output utilizing public key encryption; and

said second computer system for outputting said decrypted output from said second computer system to said speaker.

25 17. The system according to claim 16, further comprising said computer system for encrypting said input analog signal utilizing a key pair, said key pair including a public key and a private key.

30 18. The system according to claim 17, further comprising said computer system for encrypting said input analog signal utilizing said public key.

Docket No. AUS920010952US1

19. The system according to claim 18, further comprising:

said second computer system for obtaining said private key of said computer system; and

5 said second computer system for decrypting said encrypted input analog signal utilizing said private key.

20. The system according to claim 19, further comprising said computer system for exchanging said private key
10 between said computer system and said second computer system prior to transmissions of radio signals.

21. A computer program product executing within a data processing system for securing radio transmissions
15 utilizing a conventional radio, said computer program product comprising the data processing system implemented steps of:

instruction means for providing a conventional radio, said conventional radio being incapable of
20 encrypting or decrypting signals;

instruction means for providing a computer system coupled between a microphone and said radio, wherein inputs into said radio are received first by said computer system, said computer system being separate and
25 apart from said radio;

instruction means for receiving, within said computer system, an input analog signal from said microphone;

instruction means for encrypting, within said
30 computer system, said input analog signal utilizing public key encryption;

Docket No. AUS920010952US1

instruction means for passing said encrypted input analog signal from said computer system to said radio; and

5 instruction means for transmitting said encrypted input analog signal utilizing said radio, wherein radio transmissions from said radio are secured.

22. The product according to claim 21, further comprising instruction means for encrypting, within said
10 computer system, said input analog signal utilizing a key pair, said key pair including a public key and a private key.

23. The product according to claim 22, further
15 comprising instruction means for encrypting, within said computer system, said input analog signal utilizing said public key.

24. The product according to claim 21, further
20 comprising:

instruction means for receiving, within a Java application executing within said computer system, said input analog signal from said microphone;

25 instruction means for encrypting, utilizing said Java application, said input analog signal utilizing public key encryption;

instruction means for passing said encrypted input analog signal from said Java application to said radio.

30 25. The product according to claim 21, further comprising instruction means for passing said encrypted

Docket No. AUS920010952US1

analog signal from said computer system to a microphone port included in said radio.

26. The product according to claim 21, further
5 comprising:

instruction means for providing a second conventional radio, said second conventional radio being incapable of encrypting or decrypting signals;

- 10 instruction means for providing a second computer system coupled between a speaker and said second radio, wherein outputs from said second radio are received first by said second computer system before being output to said speaker, said second computer system being separate and apart from said second radio;

- 15 instruction means for receiving, within said second computer system, an encrypted output from a speaker port included within said second radio;

- instruction means for decrypting, within said second computer system, said encrypted output utilizing public
20 key encryption; and

instruction means for outputting said decrypted output from said second computer system to said speaker.

27. The product according to claim 26, further
25 comprising instruction means for encrypting, within said computer system, said input analog signal utilizing a key pair, said key pair including a public key and a private key.

- 30 28. The product according to claim 27, further comprising instruction means for encrypting, within said

Docket No. AUS920010952US1

computer system, said input analog signal utilizing said public key.

29. The product according to claim 28, further
5 comprising:
instruction means for obtaining, by said second
computer system, said private key of said computer
system; and

instruction means for decrypting said encrypted
10 input analog signal utilizing said private key.

30. The product according to claim 29, further
comprising instruction means for exchanging said private
key between said computer system and said second computer
15 system prior to transmissions of radio signals.